

## **b0dap30 and b0dap32 filesystem instructions and reference**

- **The list of filesystems mounted in a given machine is located in the file /proc/mounts**
- **In case of problems check the file and compare it with the following reference example:**
- **In case of filesystems missing you can go to the machine and mount the filesystem yourself by hand (for example...."mount /cdf/svx" if /cdf/svx filesystem is missing)**
- **Example for b0dap32 machine:**
  - /dev/root / ext2 rw 0 0
  - /proc /proc proc rw 0 0
  - /dev/sda9 /home ext2 rw 0 0
  - /dev/sda6 /tmp ext2 rw 0 0
  - /dev/sda5 /usr ext2 rw 0 0
  - /dev/sda8 /var ext2 rw 0 0
  - /dev/sdb1 /cdf/code-Linux ext2 rw 0 0
  - /dev/sdc1 /code-localbackup ext2 rw 0 0
  - /dev/sdd1 /cdf/cdf-cf-data1 ext2 rw 0 0
  - /dev/sde1 /cf-data1-backup ext2 rw 0 0
  - none /dev/pts devpts rw 0 0
  - b0dau30:/cdf/people1 /cdf/people1 nfs  
rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
  - b0dau30:/cdf/people2 /cdf/people2 nfs  
rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
  - b0dau30:/cdf/people3 /cdf/people3 nfs  
rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
  - b0dau30:/cdf/code-common /cdf/code-common nfs  
rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
  - b0dau30:/data1 /data1 nfs  
rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
  - b0dau30:/cdf/code-IRIX-6.5 /cdf/code-IRIX-6.5 nfs

- rw,v3,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- /dev/sdg1 /cdf/svx/data1 ext2 rw 0 0
- b0dap61:/www /www nfs  
rw,nosuid,nodev,v3,rsize=8192,wsiz=8192,addr=b0dap61 0 0

○ **Example for b0dap30 machine:**

- /dev/root / ext2 rw 0 0
- /proc /proc proc rw 0 0
- /dev/sda5 /home ext2 rw 0 0
- /dev/sda6 /var ext2 rw 0 0
- /dev/sda7 /tmp ext2 rw 0 0
- /dev/sda9 /usr ext2 rw 0 0
- none /dev/pts devpts rw 0 0
- b0dau30:/cdf/people1 /cdf/people1 nfs  
rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dau30:/cdf/people2 /cdf/people2 nfs  
rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dau30:/cdf/people3 /cdf/people3 nfs  
rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dau30:/data1 /data1 nfs rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dau30:/cdf/code-common /cdf/code-common nfs  
rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dap32:/cdf/code-Linux-2.0.34 /cdf/code-Linux nfs  
rw,rsize=8192,wsiz=8192,addr=b0dap32 0 0
- b0dap32:/cdf/cdf-cf-data1 /cdf/cdf-cf-data1 nfs  
rw,rsize=8192,wsiz=8192,addr=b0dap32 0 0
- b0dap61:/www /www nfs  
rw,nosuid,nodev,rsize=8192,wsiz=8192,addr=b0dap61 0 0
- b0dau30:/cdf/code-IRIX-6.5 /cdf/code-IRIX-6.5 nfs  
rw,rsize=8192,wsiz=8192,soft,addr=b0dau30 0 0
- b0dap32:/cdf/svx/data1 /cdf/svx/data1 nfs  
rw,nosuid,nodev,rsize=8192,wsiz=8192,addr=b0dap32 0 0

## TevMon Instructions

- **"TevMon" is a Java Program that monitors the beam conditions using information from ACNET**
  - **setup fer**
  - **tevmon**
  
- **List of ACNET variables monitored by TevMon**
  - C:LOSTP --> (mean and r.m.s) proton losses
  - C:LOSTPB --> (mean and r.m.s) anti-proton losses
  - T:L1COLI --> T.E.L on/off
  - C:B0PAGC --> abort gap
  - T:RFSUM --> RF station status
  - T:RFSUMA --> RF station status
  - C:B0ILUM --> integrated luminosity
  - SVX DANGER --> logic based on variables above determines whether silicon HV should be on.
  
- **How TevMon works:**
  - Color code is used to identify possible problems:
    - Cyan: no enough information is recorded
    - Green: OK
    - Pink: reading close to error state
    - Red: reading above threshold...error state
  
  - TevMon receives information from ACNET via SmartSockert every 10 seconds. TevMon performs three independent computations of the mean and r.m.s of the different ACNET variables for the last 6, 30 and 60 readings (it means last minute, last 5 minutes and last 10 minutes)
  
  - The Logic depends on the particular ACNET variable:
    - MEAN (C:LOSTP) or MEAN (C:LOSTPB):
      - Green: OK
      - Pink: If mean value (1, 5 or 10 minutes period) goes beyond 20K Hz
      - Pink: If mean value (1, 5 or 10 minutes period) is below 20K Hz

but the variation within the last minute shows an increase larger than 5000 Hz

- Red: If mean value (1, 5 or 10 minutes period) is above 30K Hz
- R.M.S (C:LOSTP) or R.M.S (C:LOSTPB):
  - Green: OK
  - Pink: If r.m.s (1, 5 or 10 minutes period) goes beyond 20% of the mean value and the mean value is above 10K Hz during the last 1 or 5 minutes
  - Red: If r.m.s (1, 5 or 10 minutes period) goes beyond 20% of the mean value and the mean value is above 20K Hz during last 1 or 5 minutes
- T:L1COLI:
  - Cyan: No luminosity in the machine
  - Green: value above 0.5
  - Red: If value is below 0.5 when there is luminosity in the machine
- MEAN C:B0PAGC
  - Green: Readings below 10K
  - Pink: If value (1, 5 or 10 minutes) is below 10K but the last minute variation shows an increase of 1K
  - Red: If value (1, 5 or 10 minutes) goes beyond 10K
- SIGMA T:RFSUM or SIGMA T:RFSUMA
  - Green: variation below 2%
  - Red: If r.m.s (1,5 or 10 minutes) shows a variation above 2%
- C:B0ILUM
  - Cyan: No luminosity in the machine
  - Green: OK
  - Pink: If difference between last two 1-minute readings show an increase above 5% and the losses are above 10K during the last 1 or 5 minutes
- SILICON DANGER LOGIC
  - Cyan: No luminosity in the machine
  - Green: OK (no alarms in any of the buttons)
  - Red: Alarm in any of the buttons while luminosity is present...a new error window will appear

- TevMon start a log-file each time it is restarted. The log-files are located at /cdf/people1/cdfdaq/TEVMON\_LOG/\* In this log-file the readings and decisions are recorded every time a transition in TevMon color codes occurs